IN THE CLAIMS

1. A DC-arc suppression circuit, comprising:

an electro-mechanical relay with a relay contact providing for direct current (DC) electricity to be controlled between a power source and an electrical load, and further comprising an inductive armature to open and close said relay contact;

a power transistor connected in electrical shunt with said relay contact and having an input for controlling a shunt current;

a timing circuit connected to said inductive armature and said input of the power transistor; and

a power-control signal input connected to the timing circuit;

wherein, when the timing circuit receives a command from the power-control signal input to interrupt a flow of power from said power source to said electrical load, it first turns on the power transistor, then opens said relay contact, and lastly turns off the power transistor.

2. The DC-arc suppression circuit of claim 1, wherein:

when the timing circuit receives a command from the power-control signal input to close-circuit a flow of power from said power source to said electrical load, it simply causes said relay contact to close and does not operate the power transistor.

3. The DC-arc suppression circuit of claim 1, wherein:
the power transistor is a MOSFET-type with its drain and source electrodes connected in parallel to said relay contact.

4. The DC-arc suppression circuit of claim 1, wherein:
the timing circuit is such that it includes a switch transistor to electrically control said inductive armature.

5. The DC-arc suppression circuit of claim 1, wherein:
the timing circuit is such that it provides about a two millisecond delay between a signal at the power-control signal input and its resulting operation of the relay.

6. The DC-arc suppression circuit of claim 1, wherein:
the timing circuit is such that it provides about a twenty millisecond long switch-ON pulse to the power transistor beginning at the arrival of an OFF-command signal at the power-control signal input.

7. The DC-arc suppression circuit of claim 1, wherein:
the power transistor is a MOSFET-type with its drain and source electrodes connected in parallel to said relay contact; and
the timing circuit is such that it includes a switch transistor to electrically control said inductive armature, and it provides about a two millisecond delay between a signal at the power-control signal input and its resulting operation of the relay, and it further provides about a twenty millisecond long switch-ON pulse to the power

transistor beginning at the arrival of an OFF-command signal at the power-control signal input.

8. A remote power controller, comprising:

a network client for sending and receiving power status and power control messages over a computer data network;

an electro-mechanical relay with a relay contact providing for direct current (DC) electricity to be controlled between a power source and an electrical load, and further comprising an inductive armature to open and close said relay contact;

a power transistor connected in electrical shunt with said relay contact and having an input for controlling a shunt current;

a timing circuit connected to receive a decoded power-ON command and a power-OFF command from the network client; and

wherein, when the timing circuit receives said power-OFF command to interrupt a flow of power from said power source to said electrical load, it first turns on the power transistor, then opens said relay contact, and then turns the power transistor back off.

9. The remote power controller of claim 8, wherein:

when the timing circuit receives a command from the power-control signal input to close-circuit a flow of power from said power source to said electrical load, it simply causes said relay contact to close and does not operate the power transistor.

10. The remote power controller of claim 8, wherein:

the power transistor is a MOSFET-type with its drain and source electrodes connected in parallel to said relay contact.

11. The remote power controller of claim 8, wherein:

the power transistor is a MOSFET-type with its drain and source electrodes connected in parallel to said relay contact; and

the timing circuit is such that it includes a switch transistor to electrically control said inductive armature, and it provides about a two millisecond delay between a signal at the power-control signal input and its resulting operation of the relay, and it further provides about a twenty millisecond long switch-ON pulse to the power transistor beginning at the arrival of an OFF-command signal at the power-control signal input.

12. A method for reducing the arcing of relay contacts carrying direct current electrical flows, the method comprising the steps of:

shunting a current around a pair of contacts in an electro-mechanical relay through a solid-state semiconductor device to clamp the open-circuit voltage across said pair of contacts under load;

opening said pair of contacts in said electro-mechanical relay; and

turning off said solid-state semiconductor device to unclamp the open-circuit voltage across said pair of contacts under load;

wherein, any tendency of said pair of contacts in said electro-mechanical relay to arc when being opened is suppressed.